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10/802,254

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Marc D. Etchells

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10/03/2006

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EXAMINER

HAND, MELANIE JO

ART UNIT

PAPER NUMBER

3761

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

NT

**Office Action Summary**

Application No.

10/802,254

Applicant(s)

ETCHELLS, MARC D.

Examiner

Melanie J. Hand

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-17 and 20-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-17 and 20-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments, see Remarks, filed July 10, 2006, with respect to the objection to claim 12 have been fully considered and are persuasive. The objection to claim 12 has been withdrawn.

Applicant's arguments with respect to the rejections of claims 1-12, 20, 24 and 26 under 35 U.S.C. 102 and claims 13-17, 23, 27 and 28 have been fully considered but they are not persuasive.

With respect to applicant's arguments regarding the prior art of Darnett, Darnett teaches a pad that defines a complex shape. The relevant teaching of Darnett is referred to in the rejection of claim 2 herein. Applicant's own claimed pad has an overall rectangular shape, and the disclosure appears to refer to the claimed islands as lending the complex shape, instead of defining the shape of the claimed pad by the shape of the periphery of the pad. Therefore it is unclear to Examiner why applicant argues that Darnett does not teach a pad that has a complex shape. Applicant appears to be referring to the shape of the pad when viewing a cross section as in Fig. 1 of the application, and therefore the "complex shape" is lent entirely by the shape of the island viewed. Darnett teaches this as well, in fact teaching a substantially structurally identical pad to that of the claimed invention. Darnett also teaches a barrier material comprising cellulose. It is unclear why applicant argues that the cellulose barrier taught by Darnett is incapable of acting as a barrier when applicant's own disclosure claims a barrier, setting forth cellulose as a viable material. Applicant notes correctly that a barrier sheet is not intended to dissolve or break down and implies that the cellulose barrier of Darnett (comprising paper which is comprised of cellulosic material) would, however a barrier comprising one or more materials

or combination of materials selected from a group in which cellulose is an item is what is in fact claimed. The topsheet and backsheet of Darnett are adhered together around the islands of absorbent to form valleys between the three-dimensional islands. Those areas clearly function as fluid channels in that they provide a means for fluid to flow from one valley to another. It is noted that the features upon which applicant relies (i.e., that fluid channels for fluid to flow from the external surface into the interior of the pad) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Examiner reaffirms the rejection of claim 26 as setting forth the teaching of Darnett that anticipates the predetermined perforation pattern and has repeated this citation in the rejection of claim 25 for clarification. By teaching variation of the diameters of different pores, Darnett teaches that one of ordinary skill in the art can effect a predetermined pattern wherein zones comprising pores of relatively large or small diameter define zones of increased or decreased fluid uptake.

With respect to applicant's arguments regarding rejection of claims under 35 U.S.C. 103 in view of Darnett, Examiner wishes to clarify that the optimization referred to in the rejection pertained to optimization of the dimension of the barrier sheet which causes such sheet to extend horizontally beyond the top sheet. As stated above, Darnett already teaches both a barrier sheet that is coextensive with the topsheet and backsheet and fluid channels, therefore modifying the length or width is merely an optimization, as Darnett already teaches those structural elements, and thus the motivation lies in the optimization itself, i.e. the benefit of optimizing a dimension of the barrier sheet is self-evident. Again, in applicant's arguments, applicant states that it would not be obvious to extend the barrier sheet, which is comprised of substantially identical material to the claimed invention, beyond the edge of the substantially

structurally identical pad taught by Darnett, as this creates a route for leakage, yet this feature is exactly what is being claimed, thereby implying that the claimed structural limitation would render the claimed invention inoperable. With respect to applicant's argument that Darnett does not teach "kiss cutting", kiss cutting creates perforations by punching a needle through most, but not all, of the thickness of a material. Since Darnett implicitly teaches that any process used to perforate is acceptable (Col. 2, lines 30-42), kiss cutting would qualify as such a process, and thus Darnett implicitly teaches it. The claim limitation teaching kiss cutting is therefore product-by-process claim language and gives no patentable weight. It is obvious to one of ordinary skill in the art to substitute one method of creating perforations for another as, given the same substrate, each process will yield the same product, identical to the others. The same response applies to claim 27, which applicant amended to recite a metallocene polyethylene. Metallocene refers to the catalyst employed in the production of the polyethylene film, therefore the claim limitation constitutes product-by process claim language that renders claim 27 unpatentable over the prior art of Darnett.

With respect to applicant's arguments regarding the prior art of Darnett and Fontenot, Applicant correctly notes that Darnett does not teach a motivation for applying any of the agents set forth in claim 13, however the rejection of claim 13 is a rejection in view of the prior art of Fontenot, which is employed as a secondary reference providing the motivation to add such an agent. The prior art of Fontenot is used precisely because the prior art of Darnett does not teach such agents.

With respect to applicant's arguments regarding the prior art of Darnett and Larssonneur, because Darnett and Larssonneur both teach polyethylene for the top and backsheets and Larssonneur teaches that such sheets can be altered so as to be hingeably connected in order to fit within a tray, as is common for the use of absorbent food pads, it would be obvious to one of

ordinary skill in the art to modify the portions of said topsheet and bottomsheets that extend beyond the area comprising the absorbent islands so as to be hingeably connected to line the walls of a tray to prevent leakage and contamination. The side panels of Larssonneur are sealed edges, which are also present in the pad of Darnett.

***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1,3-12, 20-22, 24 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Darnett (U.S. Patent No. 6,270,873).

With respect to **Claims 1,4,5,7,8,25**: Darnett teaches an absorbent food pad comprising microperforated laminate polyethylene top sheet 10, bottom sheet 11 which is identical to topsheet 10, and pouches 14 of superabsorbent material, which constitute a complex polygonal shape. There is at least one pouch, therefore other embodiments taught by Darnett having, for example four (Fig. 1a) or twelve (Fig. 4a) pouches, define other complex shapes such that the pad has at least one complex shape. (Col. 6, lines 39-56) The topsheet and backsheet of Darnett are adhered together around the islands of absorbent to form valleys between the three-dimensional islands. Those valleys function as fluid channels in that they provide a means for fluid to flow from one valley to another, transporting liquid throughout the pad.

With respect to **Claims 3,6,9**: Darnett teaches that the top and bottom sheets 10,11 are comprised of three layers. (Col. 7, lines 33-36) With respect to claim 9, Darnett teaches a thickness of 42 microns for a two-layer embodiment and 37 microns plus the thickness of the

intermediate paper sheet 22. The total thickness of the three-layer embodiment is intended to be substantially identical to that of the two-layer embodiment, therefore the range of thicknesses taught by Darnett is 37-42 microns, or 0.0014 – 0.0017 inches, which falls within the range set forth in claim 9.

With respect to **Claim 10**: Pouches 14 contain superabsorbent polymer. (Col. 4, lines 13-15, Col. 6, lines 47-49)

With respect to **Claims 11,12,22**: Darnett teaches pads having at least two pouches 14. The pouches are separated from each other by heat-sealing the top and bottom sheets 10,11 together around the periphery of the cells or other means. Darnett teaches a paper (i.e. cellulose) barrier layer 22 between the absorbent material and the top sheet. (Col. 3, lines 43-48)

With respect to **Claim 20**: Please see the rejection of Claim 1 in addition to the following: The areas between pouches 14 where the topsheet 10 and bottom sheet 11 are sealed together form valleys (channels) for transporting fluid.

With respect to **Claim 21**: Darnett teaches that the topsheet 21 and bottomsheets 24 are structurally identical and are comprised of a laminate of three layers, one of which is a paper sheet 22 that is capable of functioning as a transfer sheet and, since the barrier sheet of the claimed invention can be comprised of cellulose, which is a permeable material, the transfer layer taught by Darnett, comprised of cellulose, can also function as a barrier layer.

With respect to **Claim 24**: Darnett teaches a bottom sheet in Fig. 12 that is non-perforated. (Col. 7, lines 60-64)

With respect to **Claim 26**: Darnett teaches varying the microperforation size and shape to compliment the type of absorbent used to minimize loss of absorbent through the pouch wall, therefore the variation is capable of existing in a single sheet, defining a pre-determined pattern.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 23, 27, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darnett ('873).

With respect to **Claim 23**: Darnett does not explicitly teach kiss cutting the top sheet, however Darnett does implicitly teach that all methods of producing a perforated sheet are viable to produce the topsheet of the instant invention, and kiss-cutting is considered herein as a process that produces perforations, and Darnett teaches fluid channels, therefore it would be obvious to one of ordinary skill in the art to employ a perforated film in the prior art pad of Darnett which has been formed by kiss cutting and which thus contains fluid channels for dispersing fluid away from contact with a user with a reasonable expectation of success, thus preventing contamination.



With respect to **Claim 27**: Please see the rejection of Claim 1 in addition to the following:

Darnett teaches a polyethylene topsheet but does not explicitly teach a metallocene polyethylene. Metallocene refers to the catalyst employed in the production of the polyethylene film. The limitation with respect to metallocene polyethylene therefore constitutes product-by-process claim language rendering claim 27 unpatentable over the prior art of Darnett. See *In re Marosi*, 710 F.2d 799, 218 USPQ 289 (Fed. Cir. 1983) and *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). See also MPEP § 2113.

With respect to **Claims 28,29**: Darnett teaches an absorbent food pad comprising microperforated laminate polyethylene top sheet 10, bottom sheet 11 which is identical to topsheet 10, and pouches 14 of superabsorbent material, which constitute a complex shape. There is at least one pouch, therefore other embodiments taught by Darnett having, for example four (Fig. 1a) or twelve (Fig. 4a) pouches, define other complex shapes such that the pad has at least one complex shape. (Col. 6, lines 39-56) Darnett does not teach electrostatically holding pouches 14 in place prior to sealing thus forming a bond between the topsheet 10 and bottom sheet 11 without the use of adhesive, however the method of sealing the pouches in place is an alternate method of holding said pouches electrostatically in place or corona treating the top or bottom sheet, producing an identical product. Claim 18 is thus unpatentable over the prior art of Darnett. Examiner refers applicant to U.S. Patent No. 4,048,361 to Valyi et al which teaches a composite material comprised of polyethylene, as are the topsheet and bottomsheets of Darnett, and teaches that electrostatic bonding and adhesive bonding are equivalent methods of bonding the layers of the composite together, and to other pieces of said composite material. In the instant case substitution of equivalent methods requires no express motivation, as long as the prior art recognizes equivalency, *In re Fount* 213 USPQ 532 (CCPA 1982); *In re Siebentritt* 152

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USPQ 618 (CCPA 1967); *Graver Tank & Mfg. Co. Inc. v. Linde Air Products Co.* 85 USPQ 328 (USSC 1950).

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Darnett ('873) in view of Fontenot et al (U.S. Patent No. 6,926,682)

With respect to **Claim 13**: Darnett does not teach that pouches 14 contain any of the active agents set forth in the group in claim 13. Fontenot teaches a liner for food or food receptacles comprising a backing layer and an absorbent layer which further comprises an antibacterial agent. ('862, Abstract, Col. 3, lines 66,67, Col. 4, lines 1-3, Col. 15, lines 55-61) It would be obvious to one of ordinary skill in the art to provide antifungal means as taught by Fontenot to the pad taught by Darnett as it is also used in direct contact with food.

Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darnett ('873) in view of Larssonneur et al (U.S. Patent No. 5,320,895).

With respect to **Claims 14-17**: Please see the rejection of Claim 1 in addition to the following: Darnett teaches bottom sheet 11 and pouches 14 of absorbent material, but does not teach one or more side panels hingeably connected to said sheet. Larssonneur teaches an absorbent pad 11 with sealed side edges 110,112 comprised of topsheet 102 and bottom sheet 106 sealed together to enclose the absorbent mat 104, which is substantially identical to the sealed edges taught by Darnett. Top and bottom sheets 102,106 taught by Larssonneur are comprised of polyethylene, as are the topsheet and bottomsheets taught by Darnett. The pad 11 is adapted to fit in a tray with upstanding walls 13 therefore side edges 110,112 are capable of folding upward

to line the walls of the tray. Therefore, they are considered herein to be hingeably connected. These edges line the tray and form a leakage barrier for the fluids absorbed in the center of pad 11, therefore it would be obvious to one of ordinary skill in the art to configure the sealed side edges so as to hingeably connected as taught by Larssonneur.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie J Hand  
Examiner  
Art Unit 3761

MJH  
September 27, 2006

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SUPERVISORY PRIMARY EXAMINER

